LIMITED SOURCES JUSTIFICATION/FEDERAL SUPPLY SCHEDULES

1. Identification of the Agency and the contracting activity, and specific identification of the document as a "Limited Source Justification".

The National Aeronautics and Space Administration/Goddard Space Flight Center (NASA/GSFC) proposes to enter into a contract with Bandwidth Solutions, Inc. This document justifies the determination for restricting consideration of schedule contractors to fewer than required in Federal Acquisition Regulation (FAR) 8.405-2. The acquisition is being conducted under the authority of the Multiple-Award Schedule Program.

2. Describe the nature and /or description of the action being approved.

NASA/GSFC proposes to modify GSA Delivery Order NNG13HZ03D with Bandwidth Solutions Inc. for additional support within scope and include a priced option to extend the period of performance for Manufacturing Systems Assurance Engineering Support (MSAE). The additional option, if necessary, will be for a period of performance of June 9, 2014 through December 31, 2014. The Ice Cloud and Land Elevation Satellite (ICESat2) project is a complex multi-facility manufacturing environment that will require MSAE support for the ATLAS instrument and ICESat-2 Spacecraft hardware development, specifically, the flight laser instrument and the Spacecraft as a whole. The contractor will be expected to provide engineering expertise, analyses, information collection, on-site technical support, and technical coordination with Project personnel, science teams, and spacecraft and instrument providers, factoring in knowledge of prior NASA/GSFC missions, particularly Glory and most recently Gravity and Extreme Magnetism Small Explorer (GEMS).

3. Describe the supplies or services required to meet the agency's needs. Include estimated value.

ICESat-2 (IC2) is a flight project managed by NASA/GSFC. The ICESat-2 Project will implement a space-borne mission designed to collect altimetric measurements of the Earth's surface, optimized to measure the heights and freeboard of polar ice and global vegetation canopy. IC2 will be launched in 2016.

Portions of the IC2 spacecraft are being manufactured offsite at support services contractor facilities located in Dulles, VA with the majority being built in the Gilbert, AZ location. Additionally, the design, fabrication and testing of the IC2 Flight Laser assembly efforts will be concentrated at an offsite support services contractor facility located in Herdon, VA. NASA GSFC is pursuing manufacturing systems assurance engineering support from Bandwidth Solutions, Inc., for the IC2 spacecraft components development and manufacture plus the design fabrication and testing of the flight laser. Bandwidth Solutions, Inc., will provide manufacturing systems assurance engineering expertise, information collection, technical support at the necessary locations, and coordination with the IC2 Project. Bandwidth Solutions, Inc., has provided this type of support for the Nuclear Spectroscopic Telescope Array (NuSTAR), Solar Radiation and Climate Experiment (SORCE), Interstellar Boundary Explorer (IBEX), Gravity and Extreme Magnetism Small Explorer (GEMS) and Glory missions. Bandwidth Solutions, Inc., uniquely possesses detailed expertise in the spacecraft development of the missions upon which the IC2 spacecraft design is based and the facilities processes that will be used for the IC2 SC component integration and test. This expertise is invaluable in providing the on-site support NASA GSFC is seeking for the IC2 Project.

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4. Identify the regulatory authority justifying restriction.

In accordance with FAR 8.405-6 (a)(1)(i) (B), only one source is capable of providing the services.

5. Demonstrate the proposed contractor's unique qualifications to provide the required supply or service.

Bandwidth Solutions, Inc., is uniquely qualified to meet the requirements stated above for several reasons. Bandwidth Solutions, Inc. provided manufacturing systems assurance engineering and performed on-site surveillance for Solar Radiation and Climate Experiment (SORCE), Interstellar Boundary Explorer (IBEX), Gravity and Extreme Magnetism Small Explorer (GEMS) and Glory at Orbital. Due to Bandwidth Solutions' unique experience with the heritage spacecraft designs from Nuclear Spectroscopic Telescope Array (NuSTAR), SORCE, GEMS and IBEX the contractor is ready to immediately meet the IC2 requirements for manufacturing systems assurance engineering and on-site surveillance. This readiness is particularly important since the project is currently in Phase C and will be entering Phase D of the flight hardware life cycle by February 2014. The contractor has become an expert in the government satellite projects, spacecraft and instrument design, development, assembly and testing, the observatory integration and test, and the processes, plant operations and facilities unique to those being used to produce the IC2 spacecraft components and those facilities which will produce the IC2 Flight Laser system for the ATLAS Instrument on IC2.

Bandwidth Solutions brings unique knowledge of historical spacecraft projects and the current engineering environment necessary to successfully achieve its ICESat II manufacturing systems assurance engineering duties. Knowledge of these policies and procedures are critical to surveillance and insight effectiveness; therefore, the contractor can provide immediate value to the IC2 project management. The contractor is also conversant in the applicable NASA and GSFC directives and policies, including 7120.5D. The IC2 Project Manager requires insight into the current, complex, and evolving engineering activities for the IC2 Project as the ATLAS instrument project continues in Phase C and enters Phase D. .

No other contractor could develop this expertise to adequately fulfill the IC2 requirements as it would require years of past experience supporting the heritage missions upon which IC2 will be built. Bandwidth Solutions is intimately familiar with this role and has demonstrated through years of directly relevant work how to deliver the required reporting to NASA project management personnel. This "learning curve" would likely result in additional costs and potentially delay the successful completion of the ICESat-2 Mission.

6. A determination by the contracting officer that the order represents the best value consistent with FAR 8.404(d).

Placing an order against GSA Contract # GS-23F-0295 represents the best value and will result in the lowest overall cost alternative to meet the Government's need consistent with FAR 8.404(d). Services offered on the Federal Supply Schedule (FSS) are priced either at hourly rates or at a fixed price for performance of a specific task (such as installation, maintenance, or repair). It is anticipated that the work under this order will be performed at hourly rates. GSA has already determined the prices of fixed price services and rates of services offered at hourly rates, under schedule contracts to be fair and reasonable. Additionally, the Government will ask for any other available discounts (in accordance with FAR 8.405-4) prior to the award of an order. These combined efforts will result in the Government receiving the best value (as defined in FAR 2.101) and the lowest overall cost alternative to meet the Government's need.

7. Describe the market research conducted (see FAR Part 10) among schedule holders and the results, or state why market research was not conducted. Identify the regulatory authority justifying restriction.

Internet searches were conducted for the specific engineering skills and applicable experience qualifications and the searches did not produce any sources that met the ICESat-2 project's specific requirements. Based on the project's knowledge of the industry there are no other known sources.

8. Document any other facts supporting the use of limited source(s):

The IC2 Project is currently in Phase C and is projected to enter Phase D by February 2014. The project's sensitivity to cost growth is especially high and thus requires surveillance expertise that is immersed in the current manufacturer's environment and that possesses detailed knowledge of the specific hardware to be used on the IC2 spacecraft and on the ATLAS instrument to assist the project in early identification of technical and programmatic issues that present significant risk to incurring cost growth and schedule delays on the ATLAS instrument and IC2 Project. In particular, the flight laser contract represents the critical path for the ATLAS Instrument. In late 2013, the laser vendor revealed a subsequent several month delay in the flight laser delivery schedule, which together with prior delays represents a 1-year delay in the flight laser delivery schedule that was formally delivered in November 2012. More specifically, the recent revelation in the several month delay in the flight laser schedule now poses high risk to causes a delay in the ATLAS instrument delivery to the IC2 spacecraft, which will subsequently pose a high risk to the IC2 launch date. The ATLAS instrument project management was able to leverage Bandwidth's knowledge and experience from their onsite surveillance of the flight laser build and manufacturing activities to gain an in-depth understanding of the causes for the persistent flight laser schedule erosion. Furthermore, Bandwidth's onsite presence has enabled them to develop a close working relationship with the laser vendor's management, key engineers and specialized technicians, which has been pivotal to enabling them to work directly with the laser vendor to uncover the technical and programmatic issues in their approach and processes that have been contributing to the persistent erosion in the flight laser schedule. Moreover, Bandwidth's experience with the ATLAS laser vendor has afforded the opportunity and reception by the laser vendor to work directly with them to address the schedule erosion by assisting them in developing a realistic schedule to accurately capture the technical and programmatic risks in the flight laser development. The laser vendor has also been greatly receptive to allowing Bandwidth to assist them in modifying their programmatic management and control of day-to-day activities to afford more effective driving of schedule interim and critical milestones. Therefore , any time lost bringing an inexperienced vendor up to speed would contribute to further schedule delays and cost growth for the flight laser build, and thus schedule and cost growth for the ATLAS instrument project, as well as the ICESat-2 Project. IC2 project estimates that bringing in a contractor that is unfamiliar with government satellite projects, legacy hardware, and in particular the ATLAS flight laser development, build, manufacturing and testing would result in an additional delay in the flight laser schedule (Text Deleted) a corresponding cost growth of (Text Deleted). IC2 is seeking expert on-site surveillance as the best way to assure that the funds currently invested in IC2 will lead to mission completion within the tight resources and schedule available. Leveraging the existing, relevant and specific on-site expertise that Bandwidth Solutions, Inc., possesses towards the IC2 Project is the most cost-effective way to achieve this goal and reduce risk of contract failure.

9. State the actions, if any, the agency may take to remove or overcome any barriers that led to the restricted consideration before any subsequent acquisition for the supplies or services is made.

There are currently no efforts to overcome barriers to competition in future acquisitions as every possible effort has been made to include all schedule holders under the FSS. Any subsequent acquisition for these

services would be given the same level of schedule analysis as schedule holders and the products and services they provide can change over time. In the interest of fair opportunity, a Request for Information would also be sent to all schedule holders at the time of the need for a subsequent acquisition.